We claim:

1.   A pushbutton user interface for enabling a user to preview the effect of activating a pushbutton, comprising:

    preview sensing means for sensing an input to the
5   pushbutton that does not produce an activation of the pushbutton; and

    preview display means for displaying, in response to the sensed input, a preview indicating the effect of activating the pushbutton.

10   2.   A pushbutton user interface as in Claim 1, wherein the preview sensing means further comprises a force-sensitive resistor.

    3.   A pushbutton user interface as in Claim 1, wherein the preview sensing means further comprises a potentiometer.

15   4.   A pushbutton user interface as in Claim 1, wherein the preview sensing means further comprises a strain gauge.

    5.   A pushbutton user interface as in Claim 1, wherein the preview display means further comprises a visual display.

    6.   A pushbutton user interface as in Claim 1, wherein
20 the preview display means further comprises an audio display.

    7.   A pushbutton user interface as in Claim 1, wherein the preview display means further comprises a haptic display.

    8.   A pushbutton user interface as in Claim 1, further comprising an activation sensing means for sensing an input
25 to the pushbutton that produces an activation of the pushbutton.

9.   A pushbutton user interface as in Claim 8, wherein the preview sensing means senses motion of the pushbutton along an axis that is the same as an axis along which the activation sensing means senses motion.

5   10.   A pushbutton user interface as in Claim 8, wherein the preview sensing means senses motion of the pushbutton along an axis that is different from an axis along which the activation sensing means senses motion.

        11.   A pushbutton user interface as in Claim 10, wherein
10 the preview sensing means senses motion of the pushbutton along an axis that is orthogonal to an axis along which the activation sensing means senses motion.

        12.   A pushbutton user interface as in Claim 1, wherein the interface enables a user to preview the effect of
15 activating any of a multiplicity of pushbuttons, the pushbutton user interface further comprising means for identifying to which of the multiplicity of pushbuttons an input has been provided, wherein the preview sensing means is adapted to sense an input to the identified pushbutton that
20 does not produce an activation of the identified pushbutton, and the preview display means is adapted to produce, in response to the sensed input, a display of a preview indicating the effect of activating the identified pushbutton.

25   13.   User interface apparatus for enabling a user to preview the effect of activating a mechanical input apparatus, comprising:
        preview sensing means for sensing an input to the
        mechanical input apparatus that does not produce an
30   activation of the mechanical input apparatus; and

preview display means for displaying, in response to the sensed input, a preview indicating the effect of activating the mechanical input apparatus.

14. User interface apparatus as in Claim 13, wherein
5 the mechanical input apparatus comprises a doorknob.

15. User interface apparatus as in Claim 13, wherein the mechanical input apparatus comprises a mechanical switching apparatus.

16. A method for enabling a user to preview the effect
10 of activating a pushbutton, comprising the steps of:

        sensing an input to the pushbutton that does not produce an activation of the pushbutton; and

        displaying, in response to the sensed input, a preview indicating the effect of activating the
15   pushbutton.

17. A computer readable storage medium or media on which is stored one or more computer programs for enabling a user to preview the effect of activating a pushbutton, the one or more computer programs comprising:

20   instructions for sensing an input to the pushbutton that does not produce an activation of the pushbutton; and

        instructions for displaying, in response to the sensed input, a preview indicating the effect of
25   activating the pushbutton.